

**NARROW MWD, COMPOSITIONALLY OPTIMIZED
ETHYLENE INTERPOLYMER COMPOSITION, PROCESS FOR MAKING THE
SAME AND ARTICLE MADE THEREFROM**

5 Abstract

10 [146] The present invention pertains to an ethylene interpolymer composition characterized as having a narrow molecular weight distribution (MWD) and optimized compositional uniformity, a process for making such a composition and a fabricated article made from such composition. The novel composition is characterized as having at least two polymer components, the first component having an ATREF peak temperature, T_{peak1} and a viscosity average molecular weight, M_{v1} , and the second component having an ATREF peak temperature, T_{peak2} , and a viscosity average molecular, M_{v2} , wherein the temperature differential between T_{peak2} and T_{peak1} decreases with iincreased composition density and M_{v1}/M_{v2} is less than or equal to 1.2. The novel composition is further characterized as
15 having a M_w/M_n of less than or equal to 3.3 as determined by gel permeation chromatography, an $I_{10}/I_2 > 6.6$, and a composition density less than 0.945 gram/cubic centimeter. The novel composition exhibits high, balanced toughness properties, good processibility and surprisingly improved optical properties and is particularly well-suited for use in applications such as lamination films trash can liners and heavy duty shipping bags,
20 especially as a blown film.